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THE CALIFORNIA TUMOR REGISTRY — 1947-1956

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This year the California Tumor Registry entered its tenth year of operation in California. Conducted by the Bureau of Chronic Diseases of the State Department of Public Health, the Tumor Registry is a basic element of the State's cancer control program. Thirty-eight hospitals, which represent about one-third of the general beds in California, are participating on a voluntary basis.

The California Tumor Registry now has over 140,000 cases registered, with approximately 15,000 new cases being added each year. Follow-up status reports are obtained annually on each case until time of death.

Locally, each cooperating hospital maintains its own tumor registry as a part of the cancer program of the hospital. It also contributes to and is a part of the California Tumor Registry. The latter may thus be considered a composite of the 38 individual hospital registries.

PURPOSES

Prior to the establishment of the Tumor Registry, cancer in California could only be studied on the basis of mortality data. The morbidity data available were limited primarily to studies of special groups of patients, usually of a single hospital, or to small selected areas. Mortality data does not adequately describe the pattern of morbidity since successfully treated cases of cancer are not reflected in mortality figures. One of the purposes in establishing the registry was to provide more general data on cancer morbidity in California.

This body of information provides a means of studying the extent and nature of the cancer problem in the State; evaluating diagnostic methods, treatment and survival of cancer cases; advancing the study of the epidemiology of the disease; indicating leads for clinical and other types of research; and providing facts for professional and lay education.

The registry also serves the very basic purpose of promoting continuing care of the patient by insisting upon and aiding in carrying out an effective system of follow-up of each registered patient till time of death.

DEVELOPMENT OF THE REGISTRY

The California Tumor Registry was first organized in 1947 on a pilot study basis with three county hospitals and six private hospitals participating. Medical records of neoplasm cases with hospital discharge dates beginning January 1, 1942, were abstracted to establish a backlog of experience. From time to time other hospitals requested entry to the registry. It now includes 38 hospitals of which 25 are private, 11 are county, one is a large tumor clinic, and one is a large state hospital.

A great impetus to the establishment of hospital tumor registries was given by the American College of Surgeons in 1953 when this organization's Board of Regents adopted a set of standards for approved cancer programs. The minimum requirements were: (1) a Committee on Can-

Maxine Wolf and Marian Iida index new cases in the California Tumor Registry Wheel-dex, which is an index to the master file of all case histories received by the California Department of Public Health

cer of the hospital medical staff; and (2) a properly functioning cancer registry. The latter requirement became effective after December 31, 1955. The interest of the American College of Surgeons is to encourage the evaluation of cancer experience at the local hospital level. While much cancer work goes on in the smaller hospitals of 150-200 bed size, medical publications most often report on studies done by the large centers where the results obtained may differ from the findings in the small general hospital.

Requests have now been received by the California Tumor Registry from 75 hospitals in California that are not participating in the program for information and assistance in setting up tumor registries. Upon request, services are extended by the California Tumor Registry to these hospitals, including the supplying of the standard abstract forms, limited consultation, and invitations to participate in tumor registry workshops.

The California Tumor Registry has always worked very closely with the Cancer Commission of the California Medical Association. Following a recommendation of the American College of Surgeons, the California Medical Association recently appointed an Advisory Committee to the Tumor Registry. This committee has been meeting with the Chief of the Bureau of Chronic Diseases to discuss plans and functioning of the Tumor Registry.

OPERATION OF THE REGISTRY

A brief description of the origin, processing and use of tumor registry records and data will illustrate the functioning of the registry.

Origin of Records

A case enters the California Tumor Registry each time a patient is admitted to any one of the 38 participating hospitals with a diagnosis of cancer or a borderline malignant tumor. As an example, a woman with cancer of the breast is admitted to *X* hospital in March of 1954. The hospital registry worker learns of the case from the hospital medical records and enters it in the hospital registry files. Three months after the discharge of the patient (June, 1954) all pertinent identifying, diagnostic and treatment data regarding the patient and her tumor are abstracted onto a standard form provided by the State Registry. This information includes age, sex, type and site of the cancer, stage of the disease, histopathologic confirmation, and treatment given. One copy of the abstract remains in the hospital tumor registry; another is forwarded to and becomes a part of the State Tumor Registry.

Processing in State Office

When the abstract form for this patient reaches the state office, it is first cleared against a master index of all previously reported cases to determine whether this patient has ever been reported by another participating hospital. After indexing, the abstract is edited and when necessary, a query is sent to the reporting hospital for clarification or completeness of the items. Since there is a period of time between the patient's discharge from the hospital and the time that her abstract reaches the state office, a search is made through the state-wide death records for the case. Pertinent data on the abstract is coded according to procedures which are uniform for all hospitals, and the information is punched onto I. B. M. tabulating cards.

Follow-up of Patient

Follow-up information is requested from each hospital once a year on the anniversary of the patient's month of admission to the reporting hospital. A list of all cases (not known to be dead) with anniversaries occurring in a given month will be sent to the hospitals that month. This is in accordance with the recommendation of the American College of Surgeons that patients be examined on or near the anniversary date. The case of breast cancer would be included in the listing for hospital *X* for March admissions. This case would then appear in the March listings each year for hospital *X* for the rest of the patient's life.

The hospital returns the list with the latest information on the status of each patient; i.e. whether alive or dead, with or without the neoplasm present. This information may come from existing hospital records, from a follow-up examination when the patient has been seen by a county hospital, or from the patient's private physician. Stress is placed on the physician's responsibility for follow-up and all plans for follow-up are worked out carefully for each hospital by the physicians concerned.

Reports

Each case reported to the California Tumor Registry becomes part of the data which is produced. Reports are made periodically to individual hospitals. These reports describe the kinds of cases seen in the hospital in different time periods in respect to site distribution, treatment and other variables of interest in a hospital's cancer program. Survival tables are also prepared which allow the hospitals to evaluate the effects of their cancer control work. The breast cancer case in hospital *X* would appear in the report of experience for that hospital.

It would also appear in summary reports based on the combined experience of all hospitals. (These will be discussed later in detail.)

Services to Individual Hospitals

Mention has been made of the reports prepared by the California Tumor Registry for the individual hospitals. These fulfill, for the hospitals, the requirement of the American College of Surgeons that—"Each year a report will be made to the medical staff of the current work of the Registry. * * *"

Other services are given, including:

(1) Medical and records consultation—a medical consultant and two hospital registry consultants work closely with the staffs in the individual hospitals.

(2) Financial assistance—for providing personnel in conducting the hospital registry.

(3) Methodology and forms—"Guides" for the organization and operation of a hospital registry; "Handbooks" containing detailed directions, definitions and standard forms for abstracting cases and doing follow-up.

(4) Diagnostic indexes — Indexes of all cases reported by a hospital by year and diagnoses,

which contain enough pertinent data for research use.

(5) Workshops for tumor registry personnel.

WORKSHOPS FOR TUMOR REGISTRY PERSONNEL

A description of the workshops conducted for hospital tumor registry workers will help illustrate the progress which has been made in regard to tumor registries since the California Tumor Registry was inaugurated.

A series of four workshops has now been conducted—each with sessions in Berkeley and Los Angeles—in 1951, 1952, 1954, and 1955-56. The subject matter has varied with the progress and growth of the registry.

1951

The chief emphasis of the first workshop in early 1951 was on the abstracting of case information from clinical records and the completeness of case reporting. A total of 75 hospital tumor registry personnel attended.

1952

By September of 1952, when the next workshops took place, the emphasis was on the second stage in the development of tumor registries—the follow-up of patients. This problem was discussed from the standpoint of the physician, the hospital tumor registry worker and the statistician by representatives from the respective fields. Approximately 70 persons attended these sessions.

1954

The workshops held in 1954 followed the action of the American College of Surgeons in setting up standards for approved cancer programs. This action and their publication of a Manual for Cancer Programs, based on their minimum requirements for approval of a cancer program, had generated many questions with regard to the relationships of approved registries to the California Tumor Registry. The Cancer Commission of the California Medical Association, which specifies minimum standards for approval of their consultative tumor boards, was also interested in the changes occurring in the cancer program in hospitals.

As a result, clarification of the inter-relationship of the three organizations became the focus for the 1954 workshops. Spokesmen for the American College of Surgeons, the California Medical Association and the California Tumor Registry discussed the integration of the cancer program in a hospital. Because of the general interest in this subject expressed by hospitals not formally participating in the State Registry, invitations were extended to hospitals from whom inquires had been received and to hospitals with Consultative Tumor Boards. Twelve nonparticipating hospitals sent representatives. A total of 90 persons attended.

1955-56

Almost 200 people representing 68 hospitals in California attended the workshops in 1955-56. Of these, 32 hospitals were formally participating in the California Tumor Registry; 36 were not. A new feature was a special session for physicians and hospital administrators jointly sponsored by the Cancer Commission of the California Medical Association and the California Tumor Registry. Thirty-six physicians and five hospital administrators attended these sessions.

The program for the 1955-56 workshop sessions again reflected the current interests of the people conducting tumor registries. Registries which had been in operation for some time had accumulated sufficient data for statistical analyses. Statistical uses of tumor registry data, therefore, were discussed from the standpoint of the individual hospital tumor registry. It was pointed out that the tumor registry was a vast resource of statistical research data—much of it not available in any other single place. Registry supervisors discussed the organization of the hospital registries and related this to methods of obtaining statistical data from their own hospital registries.

In addition to the discussion of the use of records in each hospital, the current series of individual hospital reports being prepared by the State Tumor Registry was reviewed. Each individual hospital's experience is matched with the total experience of the California Registry for comparable periods of time. The trend in caseload, the number of cases for each site, the age-sex distribution, the stage of the disease upon admission to the hospital, and the type of treatment given are analyzed for the particular hospital in relation to the total registry experience. These and subsequent reports will answer many questions for the hospital, i.e. How many cases have they seen? What are the trends in therapy? How many years of cancer-free life have their patients been given? Other questions will be raised which can be the starting point for further statistical research and clinical investigation.

USES OF STATE-WIDE TUMOR REGISTRY DATA

While the hospital registry serves as a ready source of information to physicians in a single institution, the California Tumor Registry also makes available the combined data from 38 hospitals in the State. The accumulation on a state-wide basis of this great volume of diagnostic, treatment, and follow-up information makes possible statistical analyses of the extent and nature of the cancer problem in California on a scale not available in one hospital or one physician's practice.

A test comparing the mortality patterns of the Tumor Registry and the entire State showed them to be similar. This suggests that the Tumor Registry data are representative of cancer experience in California. Description of cases by site, the trends of treatment given, the age and sex of cancer patients and other information is being obtained which can be used to broadly describe the cancer picture in California.

Epidemiology

The Tumor Registry can also be used to provide avenues for epidemiologic investigation. For example, an association between cancer and socio-economic status has been suspected. By contrasting county and private hospital admissions, variations are observed in the site, age and survival of cancer patients. In the county hospitals, for instance, 16.4 percent of the male patients age 45-64 have lung cancer, whereas in private hospitals the figure is only 8.4 percent. Cancer of the stomach is also more prevalent among males age 45-64 in county hospitals. Cancer of the cervix occurs more frequently among county hos-

pital female cancer patients. Conversely, a higher percentage of private hospital male cancer patients age 45-64 have skin cancer.

Survival Data

Determination of the course of the disease and the length of survival of the cancer patient through continuous follow-up permits the evaluation of current control methods as applied in California. A great variety of data has been made available to physicians and others engaged in cancer research and education.

The California Tumor Registry has prepared survival data to be presented at the Third National Cancer Conference, cosponsored by the National Cancer Institute and the American Cancer Society, which will be held in Detroit in June 4-6, 1956. The California Tumor Registry is one of 18 agencies selected to present their findings at the conference. Comparable statistics will be presented by all of the contributing registries on selected sites of cancer. Survival by the stage of the disease when first diagnosed, and the type of treatment administered has been submitted for analysis.

A portion of the survival data prepared for the Third National Cancer Congress will be presented in an early issue of California's Health.

THE FUTURE OF THE REGISTRY

The actions of the American College of Surgeons and the increased interest in hospital registries has resulted in many requests from additional hospitals for inclusion in the California Tumor Registry. These requests have been tabled because of the lack of additional funds for financial support of individual hospital registries as well as for the additional statistical, clerical and tabulation personnel which would be needed in the state office if the registry were expanded. The Council of the California Medical Association at its last meeting in May, 1956, reaffirmed its support for and in principle endorsed expansion of the registry. If the California Tumor Registry is expanded it will be able to offer its assistance and services to many more hospitals and in this way extend the knowledge of cancer morbidity in California as a basis for control of the disease.

California Medical Association Reaffirms Use of Salk Vaccine

An editorial and article appearing in the March, 1956, issue of *California Medicine* call attention to the report of a special committee of the California Medical Association which has been studying the present status of Salk vaccine. In the report the "committee recommends approval for further use by physicians and health agencies of the present vaccine licensed and released under current standards."

This was the major point made by the committee headed by Edward B. Shaw, M.D., San Francisco. The complete statement follows:

1. The vaccine employed in the spring of 1955 proved to have dangers which made it unsatisfactory for further use. These dangers were later shown to be implicit in the methods of manufacture and testing then recommended.
2. Methods of production and of safety testing have been repeatedly revised and refined to a point where safety is as nearly assured as it is likely to be in any similar virus vaccine—absolute safety being almost unattainable.
3. Experience with vaccine used in the spring and summer of 1955 whatever its relative safety, provides evidence of immunity response as determined by serologic studies and by decrease of paralytic disease in epidemic situations. This encourages the belief that a vaccine of this nature may prove to be effective.
4. Final evaluation of the protective effect of the vaccine now available must await the accumulation of sufficient evidence to indicate if increased safety has been accompanied by unimpaired antigenicity.
5. It is hoped that additional experience and surveillance will define the limitations of protection induced. Only thus may be determined the virtue of vaccines of this nature, the duration of immunity, the necessity of recall injections and finally to point the way toward better vaccines with improved antigenicity and unequivocal safety.
6. The committee recommends approval of the further use by physicians and health agencies of the present vaccine licensed and released under current standards.

Health Education Workshop To Be Held in San Diego

Sponsored by 10 San Diego County agencies, the Fifth Annual Health Education Workshop will be held at San Diego State College, August 6 through August 17th.

Designed primarily for students, teachers, school administrators, school nurses, physicians and others interested in school health, the workshop will provide an opportunity for participants to consider methods and techniques of education in health for all grades and for the health instruction program in related areas such as social studies, science and physical education.

Among the national leaders in health education who will serve as consultants to the workshop are: Dr. Fred Hein, Educational Consultant, American Medical Association; Charlotte Leach, Health Education Consultant, National Tuberculosis Association; Dr. Bernice Moss, Professor of Health Education, University of Utah; Dr. Perry Sandell, Educational Consultant, American Dental Association; and Elsa Schneider, Specialist in Health, Physical Education and Recreation, U. S. Office of Education.

Tuition fees for the two-week course will be $17 and two units of upper division credit may be earned. Further information may be obtained from Miss Angela Kitzinger, Chairman, Health Education Department, San Diego State College, San Diego 15.

In addition to the State College, San Diego, sponsors of the workshop include the Tuberculosis and Health Association, Department of Public Health, Cancer Society, Medical Society, Dental Society, Heart Association, County Schools, City Schools, and the Ninth District, California Congress of Parents and Teachers.

POLIO VACCINE SHORTAGE EASES; ELIGIBLE GROUPS URGED TO PARTICIPATE IN PROGRAM

The California Department of Public Health on June 1st summarized trends in the incidence of poliomyelitis, the availability and usage of vaccine as follows; and again urged that unvaccinated persons in the eligible groups be vaccinated through either the public or private programs available in their communities.

POLIO TRENDS

The incidence of poliomyelitis in California during the 1955 disease year which just ended as of March 31st, was unusually low. Only 2,202 cases, of which 1,270 were paralytic, were reported as compared to 4,329 cases for the 1954 disease year. Most of this reduction is attributed to natural variations in poliomyelitis incidence which occur from year to year. Observations on children under 15 years of age, however, have shown that during the last season approximately 75 percent less paralytic polio occurred among the vaccinated than among nonvaccinated children.

It is too early to predict what the incidence will be during the current disease year which began on April 1st. As of May 19th, 146 cases had been reported for the current season as compared with 163 cases for the same period last year. The number of paralytic cases was almost identical—94 cases this year and 95 cases last year. Only five paralytic cases, or approximately 5 percent of the paralytic cases reported this year, were among vaccinated children.

VACCINE SUPPLY AND USAGE

While still not in ample supply, the vaccine availability has improved considerably in both commercial and public agency channels. The vaccine releases to California increased during May with six allocations being made—totaling 1,004,697 cc, compared with slightly over 588,000 cc during April. The allocations were divided 50 percent to public agency programs and 50 percent into commercial channels.

As of April 30th, 34 health jurisdictions had received all of their federally purchased vaccine. During May an additional 21 jurisdictions received the rest of their allotments (making a grand total of 55 health jurisdictions completed) of the vaccine available under the first congressional appropriation.

Vaccine usage has likewise improved with the state average for first inoculations, estimated now at 41 percent of the eligible population (0-14 years) and 28 percent also having had the second shots. The percentage protected varies widely from area to area with a high for Modesto City of 56 percent, Merced County with 50.8 percent first shots, and Alameda and El Dorado Counties each with 46 percent—the lowest percentages being found in Sonoma County with 4.9 percent, San Benito County 6.3 percent, and Nevada County with 7.6 percent.

A new appropriation to purchase additional vaccine was passed by Congress in May. This will mean another 1,653,930 cc of vaccine will be available, as production permits, for use in public agency programs in the State through June 30, 1957.

It is hoped that this vaccine will be utilized to protect persons in the priority groups as rapidly as it becomes available. As soon as evidence is obtained that the demand and acceptance of the 0-14 age group and pregnant women has been satisfied, or if production increases dramatically, the broadening of the priorities will be immediately considered.

Recommendations have been made by the National Advisory Committee and the Committee on Control of Infectious Diseases of the American Academy of Pediatrics that the inoculations continue during the summer months. California's State Advisory Committee on Poliomyelitis is now being polled on this question.

Health Officer Change

Sonoma County

James T. Harrison, M.D., has been appointed to succeed Robert S. Westphal, M.D., as health officer of Sonoma County. Dr. Westphal is now assistant to the Area Director, World Health Organization, with headquarters in Alexandria, Egypt.

Milton P. Duffy Receives Harvey W. Wiley Award

First person to have the distinction of receiving the Harvey W. Wiley Award is Milton P. Duffy, Chief of the Bureau of Food and Drug Inspections, State Department of Public Health. "In recognition of outstanding service and devotion to duty in administering the Food and Drug Laws of his state—and the leadership and guidance he has provided to his fellow workers throughout the Nation," the award was presented to Mr. Duffy in New York City on May 10, 1956, by the Association of Food and Drug Officials of the United States on the fiftieth anniversary of the enactment of the first federal food and drug law and the sixtieth anniversary of the founding of the association.

Presentation of the award, named for the author of the Nation's first pure food and drug law signed by President Theodore Roosevelt on June 30, 1906, was made by G. Cullen Thomas, Chairman of the Citizens' Advisory Committee on the Food and Drug Administration.

Chief of the Bureau of Food and Drug Inspections since its establishment in 1921, Mr. Duffy was presented with a resolution by the State Board of Public Health in 1954 lauding him for his outstanding contribution to the protection of the health of the people of California during his 40 years of service and commending him for his contribution in the industrial development of food packing and processing in California.

Air Measurement Demonstration Scheduled for San Diego

New, automatic recording instruments will be installed on a demonstration basis by the State Department of Public Health in San Diego to assist county officials in the establishment of an air monitoring network as part of a new air pollution control program.

The first automatic measurement instruments to be received by the department, they will continuously measure the amount of oxidants and nitrogen dioxide in the atmosphere. The demonstration will emphasize the need for such a program in San Diego County, the third largest metropolitan area in California.

State Board of Public Health Grants 284 PHN Certificates

During the calendar year 1955 certificates were granted by the State Board of Public Health to 284 nurses who had completed an accredited university or college program of study in public health nursing. Of the 284, all but 18 held bachelor's or master's degrees.

The following table shows the number of state public health nursing certificates issued to nurses who had completed university preparation during the 10-year period beginning in 1946:

Year	Total	Preparation obtained at: California universities	Preparation obtained at: Out-of-state institutions
TOTAL	1,890	977	913
1946	113	42	71
1947	143	45	98
1948	210	97	113
1949	200	94	106
1950	169	84	85
1951	190	95	95
1952	133	50	83
1953	255	158	97
1954	193	123	70
1955	284	189	95

As indicated above, the number of certificates issued in 1955 is larger than in any previous year. This is due to the fact that three universities in the State are now offering collegiate basic programs of study accredited for the preparation of nurses for staff level positions. However, not all graduates from the basic program enter public health nursing.

During the last three years the number of certificates issued to nurses who completed their preparation at California universities has exceeded the number granted to nurses from out-of-state universities, reversing the trend of the preceding seven years when the number of nurses from out-of-state universities to whom certificates were granted was larger than the number from California universities.

The following table indicates the universities at which public health nurses certificated by the State Board of Health in 1954 and 1955 obtained their preparation:

	1954			1955		
	Total	Post graduate	Collegiate basic	Total	Post graduate	Collegiate basic
Totals	193	138	55	284	125	159
California universities						
University of California						
San Francisco	90	41	49	91	28	63
Los Angeles	33	33	--	34	24	10
Stanford University	--	--	--	64	--	64
Out-of-state universities	70	64	6	95	73	22

Since the University of California at Los Angeles and Stanford University received their accreditation for collegiate basic programs in November, 1954, no certificates were issued to the graduates until 1955. U. C. L. A. has had a public health program for graduate nurses since 1938.

The 95 nurses who obtained their preparation for public health nursing outside of California came from 25 universities and colleges. The out-of-state universities at which the largest number of nurses coming to California obtained their preparation were:

University of Washington	18
University of Minnesota	12
University of Oregon	9

One to five nurses obtained their preparation at each of the other 22 institutions.

Conference for Nurses Planned by U. C. L. A.

A conference for general duty nurses, public health staff nurses and head nurses is being planned by University of California Extension and the U. C. L. A. School of Nursing, to be held September 4th through 8th at the new Communicable Diseases Building of the Los Angeles County General Hospital.

"Interpersonal Relationship in Patient Care" will be the theme of the conference which is being planned in cooperation with the Los Angeles County General Hospital, Unit "E" of the California League for Nursing and the Los Angeles District of the California Federation of Women's Clubs.

Claire E. Bartholomew, assistant professor of psychiatric nursing at U. C. L. A. is the conference coordinator. A $20 total fee will include tuition only and one unit of university credit is optional for the course. Registration should be completed by mail prior to August 4th, according to Miss Bartholomew. Those from outside the Los Angeles area who may have need for housing information should contact Miss DeLores Schmmel, Director of Nursing, Hunting Memorial Hospital, 100 Congress Street, Pasadena 2, California.

Bulletins listing complete information concerning conference arrangements, discussion topics and study hours, are available on request to the Department of Conferences, University of California Extension, Los Angeles 24.

SPECIAL CENSUS RELEASES *

Special Censuses of California Cities, **Series P-28** *Glenn County:* Orland (875); *Inyo County:* Bishop (875); *Kings County:* Corcoran (875); *Los Angeles County:* Culver City (883), El Monte (875); *Marin County: San Rafael* (881); *Orange County: Anaheim* (880); *Riverside County:* Banning (875), Blythe (875), Hemet (875), Indio (875); *San Bernardino County:* San Bernardino (884); *San Diego County:* Chula Vista (873); *San Joaquin County:* Manteca (875); *Siskiyou County:* Montague (875); *Tehama County:* Red Bluff (875); *Tulare County:* Dinuba (875), Exeter (875), Lindsay (875); *Ventura County:* Port Hueneme (875); *Yolo County:* Davis (875).

Copies of these releases may be obtained from: Library, Bureau of Foreign and Domestic Commerce, United States Department of Commerce at 419 Customs Building, 555 Battery Street, San Francisco, Calif., or at Room 450, 31 South Broadway, Los Angeles, Calif.

* In ordering, specify series and number as shown in parentheses. These numbers are *not* population figures.

1956 Public Health Nursing Count Shows 2,833 Employed in State

The annual count and study of qualifications of nurses engaged in public health nursing in California as of January 1, 1956, shows the total number of nurses employed by state and local agencies as 2,833. They were employed in 545 agencies.

The following tables show the comparison of this year's figures with those of 1955 and 10 years ago:

Type of agency	*Number of agencies*			*Number of nurses*		
	1946	*1955*	*1956*	*1946*	*1955*	*1956*
Total	336	516	545	1,506	2,649	2,833
State	4	1	1	54	16	19
Local	332	515	544	1,452	2,633	2,814
Health departments	43	56	59	649	1,135	1,169
Boards of education	237	430	456	587	1,280	1,421
Other official	13	0	0	19	0	0
Visiting nurse associations	39	29	29	197	218	224

There was an increase of 184 nurses employed in local agencies in 1956 as compared with 1955. Thirty-four of this number were employed in health departments, 141 in boards of education and six in visiting nurse associations.

The following table shows the number of nurses employed in staff positions in local agencies and those employed as directors, assistant directors, consultants and supervisors.

	Total	*Directors, asst. dir., consultants, supervisors*	*Staff*
Total	2,814	265	2,549
Health departments	1,169	175	994
Boards of education	1,421	50	1,371
Visiting nurse associations	224	40	184

This was due to a variety of reasons, including marriage, home responsibilities, retirement, death, illness or entry into other fields of employment. With this attrition and the present rate of increase in positions, approximately 540 nurses are needed each year to fill public health nursing vacancies in California.

The table below shows the comparison of this year's data with those of 1955 and 1946 in regard to educational qualifications of nurses engaged in public health nursing.

This table shows that in comparing the figures of 1956 with those of a year ago 127 more nurses have completed accredited programs of study in public health nursing. One hundred five of these nurses had their preparation for public health nursing in collegiate basic schools of nursing.

In 1955 approximately 360 nurses left the field of public health nursing.

	1946		*1955*		*1956*	
Public health nurses	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*
Included in survey	1,397	100	2,581	100	2,766	100
Completed university program of study in public health nurse	494	35.4	1,307	50.6	1,434	51.8
One or more college degrees	354	25.3	1,181	45.9	1,355	48.8

Latest Serologic Tests Demonstrated at Workshop

A workshop in serologic tests for syphilis for California university and college professors and instructors in serology was held in the State Department of Public Health's Berkeley laboratory during April.

Purpose of the workshop was to acquaint teaching personnel with the latest laboratory testing techniques. So far as is known, this was the first such workshop of its kind ever held in the Nation.

Latest improvements in laboratory techniques were outlined by a representative of the U. S. Department of Health, Education, and Welfare, assisted by microbiologists from the State Health Department's Division of Laboratories.

New Executive Officer in Los Angeles City Health Department

Ralph R. Sachs, M.D., was appointed executive officer for the Los Angeles City Health Department, effective May 16, 1956.

Prior to his joining the department as director of district services in March, 1955, Dr. Sachs was chief of local health services for the State of Washington and, from 1946 on, was chief of public health and welfare at the General Electric Company, Hanford Atomic Products Operation, Richland, Washington.

Public Health Positions

Berkeley

Public Health Nurses: Combined program of school, health department and visiting nursing association. Car required; liberal automobile allowance. Salary range, $396 to $459, effective July 1, 1956. Apply to Evelyn Gilcrest, Director of Public Health Nursing Services, Berkeley City Health Department, 2121 McKinley, Berkeley.

Contra Costa County

Dental Hygienist: Salary range, $414 to $496. Requires valid California license as Dental Hygienist, and, either completion of a 4-year course in dental hygiene at an approved university *or* a 2-year course in dental hygiene plus 2 years practical experience. Write to Contra Costa County Civil Service Commission, Box 710, Martinez.

Port Hueneme (Ventura County)

Public Health Nurses: Salary range, $4,000 to $5,570 for regular credential. Positions are for work in Hueneme School District public schools. Write to Hueneme School District, 620 E. Pleasant Valley Rd., Port Hueneme.

San Bernardino County

Public Health Nurses: Salary, $378 to $460. Applicants must possess valid California certificate of registration as public health nurse and a California driver's license. Salary $417 to start in desert areas.

Sanitarians: Salary, $378 to $460. Applicants must possess valid California certificate of registration as a Sanitarian and a California driver's license. Salary $417 to start in desert areas.

Write to San Bernardino County Department of Civil Service and Personnel, 236 Third St., San Bernardino.

San Diego City

Dental Hygienist: Position open in September, 1956. Salary is on a 10-months contract and teacher's basis; range from $3,800 to $6,900, plus 8 cents mileage allowance, generous sick leave, retirement and tenure of position. Qualifications include California license as Dental Hygienist and a degree; experience not required. Program emphasizes examinations, demonstrations and health education. Write to Personnel Department, San Diego City Schools, 4100 Normal St., San Diego 3.

Concern Over Rabies in Wildlife Voiced by Local Health Officers

California's sharp increase in rabies in wildlife during the past year was viewed with concern by the California Conference of Local Health Officers at the spring meeting of the conference in Los Angeles May 3d and 4th. The conference passed a resolution urging its membership (all local health officers in the State) to take leadership in bringing together, in their respective areas, representatives of the California State Department of Public Health, the U. S. Fish and Wildlife Service and the California State Department of Agriculture to develop a planned program of wildlife curtailment. It was recommended that additional wildlife trapping and poisoning be carried out in all rabies quarantine areas.

In the first four months of 1956 there were 169 reported cases of rabies in California. Of that number, 89 were in dogs, 54 in skunks, 22 in cattle, two in cats, one in a goat and one in a hog. Fifty-four of the cases were reported from the northern areas of the State. All but six of the 54 were in skunks. One hundred fourteen cases, mostly in dogs, were reported from four southern counties.

During 1954 a total of 83 cases of animal rabies and one human case were reported in California. Nineteen counties were affected. During 1955, 425 cases of animal rabies were reported, involving 34 counties. Since October 1955, the department has declared 33 affected counties to be "rabies endemic areas." This action requires that local areas institute effective rabies control measures.

In other action, the conference approved:

A program for the institution of routine X-raying of population groups with a higher tuberculosis attack rate, such as jail inmates, persons in boarding homes (especially those for the aged), patients admitted to hospitals (with particular emphasis on county hospital and clinic admissions), and low income groups.

A request that the State Department of Public Health initiate a comprehensive study of the physical, social and economic aspects of custodial care of aged and infirm persons by the State agencies responsible for these care facilities, and that the findings, including recommendations, be made available to legislative committees concerned with these problems.

A resolution that the department's program of home accident prevention be continued on state funds if and when Kellogg Foundation funds are no longer available for this purpose.

Dr. Malcolm H. Merrill, State Director of Public Health, opened the two-day conference with a review of the status of the department's budget for the coming year. Dr. Merrill, George K. Wyman, Director of the State Department of Social Welfare, and Dr. Robert D. Monlux, Fresno County health officer, participated in a panel discussion on State and Local Departments of Public Health and Welfare Relationships.

Guest speaker for the meeting was Dr. Lionel Cosin, Clinical Director of the Geriatric Unit, United Oxford Hospitals, Oxford, England, who described the evolution of the geriatric program in his country.

Other topics discussed at the session included a report from the Ad Hoc Disaster Committee on the December-January floods, new poultry legislation, preschool dental program, Imperial County Study of Infant Deaths, Child Health Conference Evaluation Project, poison control programs, home accident prevention, Town Hall Meetings on Juvenile Delinquency, prevention of blindness studies, tuberculosis subsidy and poliomyelitis control.

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